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71398 7590 06/11/2009 STEFAN KIRCHANSKI VENABLE LLP 2049 CENTURY PARK EAST 21ST FLOOR LOS ANGELES, CA 90067				
EXAMINER FISHER, ABIGAIL L				
ART UNIT		PAPER NUMBER		
1616				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/563,688

**Applicant(s)**

HOLLADAY, ROBERT J.

**Examiner**

ABIGAIL FISHER

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6-10, 18-24 and 35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-10, 18-24 and 35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_



## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 19 2009 has been entered.

Receipt of Amendments/Remarks filed on March 19 2009 is acknowledged.  
Claims 5, 11-17 and 25-34 were/stand cancelled. Claim 1 was amended. Claims **1-4, 6-10, 18-24 and 35** are pending.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Applicant Claims
2. Determining the scope and contents of the prior art.
3. Ascertaining the differences between the prior art and the claims at issue, and resolving the level of ordinary skill in the pertinent art.



4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1-4, 8-10, 18-24, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burrell et al. (US Patent No. 20030054046, cited on PTO Form 1449).**

#### **Applicant Claims**

Applicant claims a hydrogel composition comprising a hydrophilic polymer dissolved in a composition of silver in water having a total concentration of silver of between about 5 and 40 parts per million, said silver in the form of colloidal silver particles having an interior of elemental silver and a surface coating of silver oxide wherein the composition manifest antimicrobial properties.

#### **Determination of the Scope and Content of the Prior Art (MPEP §2141.01)**

Burrell et al. is directed to the treatment of inflammatory skin conditions. Example 11, number 2 discloses carboxymethyl cellulose (CMC) fiber coated directed with a nanocrystalline silver coating. The CMC was then gelled in water. The gel had significant bactericidal effect against pseudomonas aeruginosa. The silver utilized is similar to those set forth in Example 1. Example 1 discloses preparation of nanocrystalline silver coatings. The coating consists of a silver base layer and a silver oxide top layer (example 1). Example 11 (number 3) utilizes alginate as the hydrocolloid polymer. It is disclosed that the concentrations of silver in solution will vary but generally range from 1 to 5000 µg/ml (1 to 5000 ppm) (paragraph 0054).



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Exemplified amounts include 66 ppm in example 1 and 10 ppm in example 4. The average grain size of example 1 is 10 nm. Silver containing gel (example 4) reduced pseudomonas aeruginosa and staphylococcus aureus properties (paragraph 0242). Other hydrocolloid polymers listed as being suitable include algal extracts, seed extracts, or plant exudates such as gum arabic, guar gum, alginates etc. (paragraph 0156). It is disclosed that other ingredients can be disclosed including surface active agents (surfactants) and growth factors (paragraph 0179). It is disclosed that the ethanol can be added to a silver containing dressing to activate the coating (paragraph 0183). Exemplified is the treatment of adult acne with silver gel occluded by a hydrocolloid dressing (example 12).

**Ascertainment of the Difference Between Scope of the Prior Art and the Claims  
(MPEP §2141.012)**

Burrell et al. does not exemplify a hydrogel with a concentration of silver from 5 to 40 parts per million. Burrell et al. do not exemplify utilizing a gum as the hydrocolloid polymer. Burrell et al. do not exemplify utilizing other anti-microbial agents or additives in addition to the silver. However Burrell et al. discloses that concentrations of silver utilized include 1 to 5000 ppm and exemplify lower amount such as 66 and 10 ppm, that suitable hydrocolloids include gums such as guar gum, and that surfactants, growth factors or ethanol can be added to the composition.

**Finding of Prima Facie Obviousness Rational and Motivation  
(MPEP §2142-2143)**



It would have been obvious to one of ordinary skill in the art to vary the amount of silver utilized in the hydrogel. One of ordinary skill in the art would have been motivated to utilize an amount of silver from 1 to 5000 ppm because these are the amounts disclosed by Burrell et al. as being suitable. In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a *prima facie* case of obviousness exists. **See MPEP 2144.05 [R-5]**. Furthermore, Burrell et al. exemplify that lower amounts such as 66ppm and 10 ppm, which would indicate to one of ordinary skill in the art that lower amounts of the broad range will work.

It would have been obvious to one of ordinary skill in the art to utilize guar gum as the hydrocolloid polymer. One of ordinary skill in the art would have been motivated to utilize this polymer as it is disclosed a suitable hydrocolloid polymer to utilize. Additionally, one of ordinary skill in the art would have been motivated to replace the exemplified alginate with guar gum as both are taught by Burrell et al. as functional equivalents.

It would have been obvious to one of ordinary skill in the art to further add growth factors or surfactants or ethanol to the hydrogel. One of ordinary skill in the art would have been motivated to add any of these ingredients because all are disclosed by Burrell et al. as being suitable ingredients that can be included in the silver containing compositions.

Absent any evidence to the contrary, and based upon the teachings of the prior art, there would have been a reasonable expectation of success in practicing the



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instantly claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

**Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burrell et al. in view of Schonfeld et al. (US Patent No. 4646730).**

### **Applicant Claims**

Applicant further comprises hydrogen peroxide. The concentration is between about 1 % wt/v and about 3.0% wt/v.

### **Determination of the Scope and Content of the Prior Art (MPEP §2141.01)**

The teachings of Burrell et al. are set forth above. Specifically, Burrell et al. discloses silver containing hydrogels.

### **Ascertainment of the Difference Between Scope the Prior Art and the Claims (MPEP §2141.012)**

Burrell et al. do not specify that hydrogen peroxide can be added to the silver containing hydrogel. However, this deficiency is cured by Schonfeld et al.

Schonfeld et al. is directed to color stabilized hydrogel dressing. Schonfeld discloses that hydrogen peroxide can be added to a silver containing hydrogel as a color stabilizing agent (column 2 lines 60-61). The amount of hydrogen peroxide is from about 0.25 to 1 % of the total weight of the gel (column 3, lines 50-53).



***Finding of Prima Facie Obviousness Rational and Motivation  
(MPEP §2142-2143)***

It would have been obvious to one of ordinary skill in the art to combine the teachings of Burrell et al. and Schonfeld and utilize hydrogen peroxide. One of ordinary skill in the art would have been motivated to utilize hydrogen peroxide in order to provide color stabilization of a hydrogel as taught by Schonfeld et al.

Absent any evidence to the contrary, and based upon the teachings of the prior art, there would have been a reasonable expectation of success in practicing the instantly claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

***Response to Arguments***

Applicant argues that (1) since the examiner has not clearly determined the level of ordinary skill it is not possible to demonstrate the differences between the claimed invention and the prior art were such that that one would have had a reasonable expectation of success. Applicant argues that (2) it has always been the intent of Applicants to claim particles wherein the entire surface is coated with silver oxide therefore claim 1 has been amended to unambiguously claim a silver particle having a surface coating of silver oxide.

Applicant's arguments filed March 19 2009 have been fully considered but they are not persuasive.



Regarding applicant's first argument, the MPEP (2141) indicates that an obviousness rejection can include implicitly an indication of the level of ordinary skill in the art. The person of ordinary skill in the art is a hypothetical person who is presumed to have known the relevant art at the time of the invention. "A person of ordinary skill in the art is also a person of ordinary creativity, not an automaton." *KSR International CO. v. Teleflex Inc.* 82 USPQ 2d 1385 (Supreme Court 2007). The prior art teaches a ppm range of silver that overlaps that instantly claimed, teaches that guar gum is a suitable hydrocolloid, and growth factors or ethanol can be included. It appears that applicants concerns arise from the broad ppm range disclosed in Burrell et al. which is 1 to 5000 ppm, while the instant application claims a smaller range of about 5 to about 40 parts per million which would fall on the lower end of the broad range taught by Burrell et al. Therefore, it would appear applicants' arguments that the level of skill of one of ordinary skill would have to be determined in order to determine whether this lower claimed range would be predictable to one of ordinary skill in the art. As indicated in the Final office action mailed on December 19 2008 and as pointed out by applicant example 1 teaches a concentration of about 66 ppm. Example 4 teaches a concentration of silver of 10 ppm. Therefore, while not expressly teaching the ppm concentration of the hydrogels these examples would enable one of ordinary skill in the art to formulate silver hydrogels with the lower limit as these amounts were found to be effective. Furthermore, example 4 also teaches a diameter that falls within the range instantly claimed. Based on these teachings all of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by



known methods with no change in their respective functions and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. **Note: MPEP 2141 [R-6] *KSR International CO. v. Teleflex Inc.* 82 USPQ 2d 1385 (Supreme Court 2007).** Furthermore, since the rejection is made under 103 the prior art is available for all that it teaches. Since Burrell et al. teaches that silver with a particle size of 10 micrometers and 10 ppm concentration is effective (via example 4) one of ordinary skill could extrapolate those diameters and concentrations into other forms of administration such as the exemplified hydrogels.

Regarding applicant's second argument, the examiner reiterates that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Firstly, applicants indicate that it is their intent to claim particles wherein the entire surface is coated with silver oxide; however that is not what is claimed. What is claimed is a surface coating of silver oxide. There is nothing in the claims that limits the coating to be over the entire surface. Therefore, a broad reasonable interpretation of the claims would still render Burrell et al. which coats a portion of the surface of the silver with silver oxide.

Therefore, the rejection is maintained since applicant has not provided any persuasive arguments to overcome the rejection.

**New Rejection**



**Claims 1-4, 8-10, 18-24, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yan et al. (US PG PUB No. 20020051823, cited on PTO Form 1449) in view of Hanke (US PG PUB No. 20020122832, cited on PTO Form 1449) and Hasegawa et al. (US Patent No. 4983385).**

#### **Applicant Claims**

The instant invention claims a hydrogel composition comprising a hydrophilic polymer dissolved in a composition of silver in water having a total concentration of silver between about 5 and 40 parts per million, said silver in the form of colloidal silver particles having an interior of elemental silver and a surface coating of silver oxide, wherein the composition manifests antimicrobial properties.

#### **Determination of the Scope and Content of the Prior Art (MPEP §2141.01)**

Yan et al. is directed to nanosilver-containing antibacterial and antifungal granules (NAG) and methods for preparing and using the same. The nanosilver particles contain a metallic silver core which is surrounded by silver oxide with a diameter of 1 to 100 nm (0.001 to 0.1 micrometer) (paragraph 0002). The nanosilver preparations comprise an oxidizing agent which is preferably hydrogen peroxide (paragraph 0021 and examples). The hydrogen peroxide is exemplified in 1 % (Table 1). Exemplified particle size of the NAGs is about 25 nm (0.025 micrometers). It is taught that the silver content of the NAGs is about 20 to 100 mg of silver per gram of the NAGs (paragraph 0027). The NAGs are taught as having broad spectrum antibacterial and antifungal activity. The NAGs have bactericidal and fungicidal effects on more than twenty common pathogens including *E.coli*, *Candida albicans*, *Staphylococcus aureus*,



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*Pseudomonas aeruginosa*, etc. (paragraph 0035). It is taught that the NAGs can be used in various healthcare, medicinal and industrial products to disinfect, inhibit the growth of bacteria or fungi, and/or prevent mold formation (paragraph 0042). The NAGs used in healthcare products include, but are not limited to, ointments, lotions, sprays for treating injuries and/or urns, bacterial and fungal infections including gynecological infections such as vaginitis, among other things (paragraph 0043). Exemplified concentrations of silver in solutions is from 0.2 ppm to 1 ppm (example 2) (as the example teaches 5 g of the NAGs and it is stated earlier that the silver content of the NAGs is 20 to 100 mg silver per gram of NAG).

**Ascertainment of the Difference Between Scope the Prior Art and the Claims  
(MPEP §2141.012)**

Yan et al. does not specify a silver concentration of between about 5 and 40 parts per million. However, this deficiency is cured by Hanke.

Hanke et al. is directed to anti-microbial body care products. These products are suitable for applications wherein during normal use said product is in contact with human or animal skin and/or mucosa for longer periods of time (paragraph 0010). The products comprise silver nanoparticles dispersed in an organic matrix (paragraph 0013). The amount of the silver nanoparticles in the matrix is from 1 to 200 ppm, more preferably from 10 to 250 ppm (paragraph 0014). Exemplified amounts include 50 to 250 ppm and 25 ppm (examples 4 and 6). The particle size of the silver is from 2 to 10 nm (paragraph 0015). It is taught that absorbent structures which can be utilized as the matrix for dispersing the silver includes super absorbent polymer or hydrogels.



Yan et al. does not specify that the silver can be delivered via a hydrogel. However, this deficiency is cured by Hasegawa et al.

Hasegawa et al. is directed to an ointment base. It is taught that various bases for pharmaceutical preparations or cosmetic have been known. However, when they are applied as pharmaceutical preparations or cosmetics on wet body surfaces such as a mucous membrane they have insufficient adhesion to the applied site and insufficient local retentivity (column 1, lines 13-18). The invention of Hasegawa et al. have obtained an ointment base which has sufficient adhesion to an applied site and local retentivity even when it is applied on a wet body surface and provides prolonged action of a pharmacologically active agent or an active agent without the previous arts defects and problems. The ointment base is obtained by combining a hydrogel with certain methacrylate copolymers and a solubilizer (column 1, lines 38-47). The hydrogel is formed by a water soluble polymer and a material selected from the group consisting of water, a polyhydric alcohol and a mixture thereof (column 1, lines 56-60). Exemplified hydrogels include xanthan gum and hydroxypropyl cellulose dissolved in water (examples 2 and 3). The ointment base is suitable to be applied on a wet body surface for example oral cavity, lips, eyes, vagina, etc. The ointment can include pharmacologically active agents such as analgesics such as lidocaine, dibucaine, etc.; antibacterial or antifungal agents such as chloramphenicol, chlorophenol, etc.; anti-inflammatories; growth factors; and other additives such as stabilizers (column 3, lines 24-65).

***Finding of Prima Facie Obviousness Rationale and Motivation  
(MPEP §2142-2143)***



It would have been obvious to one of ordinary skill in the art at the time of the instant invention to combine the teachings of Yan et al., Hanke et al. and Hasegawa et al. and utilize the NAGs in a concentration that allows for silver to be present in an amount from 10 to 250 ppm. One of ordinary skill in the art would have been motivated to utilize silver in this concentration as Yan et al. teach the compositions can be utilized in healthcare products which are applied to the body and Hanke et al. teach that when nanosilver particles are going to be applied to the body for long periods of time these are suitable concentrations that are effective yet don't irritate the skin. Furthermore, it would have been obvious to one of ordinary skill in the art to manipulate the amount of silver depending on the type of treatment desired such that when there is a larger infection, larger amounts of silver would be required in order to kill all of the bacteria.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to combine the teachings of Yan et al., Hanke et al. and Hasegawa et al. and utilize the hydrogen ointment base of Hasegawa et al. to deliver the silver to the body. One of ordinary skill in the art would have been motivated to utilize a hydrogel as Yan et al. teach the compositions can be utilized to treat fungal infections and can be in the form of ointments and Hasegawa et al. teach that their ointment is advantageous for application to mucosal surfaces such as a vagina because they possess sufficient adhesion and retention when applied to these wet surfaces.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to combine the teachings of Yan et al., Hanke et al. and Hasegawa et al. to utilize hydrogen peroxide in the invention of Yan et al. One of ordinary skill in the



art would have been motivated to utilize hydrogen peroxide as Yan et al. expressly teach utilizing an oxidizing agent in combination with the NAGs and the exemplified oxidizing agent is hydrogen peroxide.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to combine the teachings of Yan et al., Hanke et al. and Hasegawa et al. and utilize xanthan gum or cellulose polymers as the water soluble polymer for forming hydrogels. One of ordinary skill in the art would have been motivated to utilize these polymers as they are water soluble polymer exemplified by Hasegawa et al. for forming the hydrogels of the ointment.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to combine the teachings of Yan et al., Hanke et al. and Hasegawa et al. and add additional components such as other antibacterial (antimicrobial) agents and analgesics such as lidocaine and dibucaine. One of ordinary skill in the art would have been motivated to add the analgesics in order to relieve pain. One of ordinary skill in the art would have been motivated to add other antibacterial agents as the compositions of Yan et al. are designed to treat infections. As a general principle it is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose, the idea of combining them flows logically from their having been individually taught in the prior art. See *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) **MPEP 2144.06**.



Regarding the claimed particle size, Yan et al. teach an amount that overlaps that instantly claimed. In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a *prima facie* case of obviousness exists. **See MPEP 2144.05 [R-5]**

Absent any evidence to the contrary, and based upon the teachings of the prior art, there would have been a reasonable expectation of success in practicing the instantly claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thornton*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).



**Claims 1-4, 6-10, 18-24 and 35 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14 of U.S. Patent No. 7135195 in view of Burrell et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims overlap in scope.**

The instant application claims a hydrogel composition comprising a hydrophilic polymer dissolved in a composition of silver in water having a total concentration of silver of between about 5 and 40 parts per million, said silver in the form of colloidal silver particles having an interior of elemental silver and a surface of silver oxide wherein the composition manifest antimicrobial properties.

Patent '195 claims a composition of silver in water comprising a concentration of silver of between about 5 and 40 parts per million, the silver in the form of colloidal silver particles having an interior of elemental silver and a surface of silver oxide. The silver particles have a diameter greater than 0.005 micrometers and less than 0.015 micrometers. The composition exhibits antimicrobial properties. Patent '195 claims all the instant limitations in the dependent claims.

Patent '195 does not claim that the composition comprises a hydrophilic polymer and is in the form of a hydrogel. However, this deficiency is cured by Burrell et al. discloses that formulations of silver that are used to treat skin diseases like acne include hydrogels. The polymers utilized to create hydrogels include alginates, guar gum, and cellulose and derivatives (paragraphs 0154-0156 and 0220).



It would have been obvious to one of ordinary skill in the art to combine the teachings of Patent '195 and Burrell et al. and formulate the composition of Patent '195 into a hydrogel. One of ordinary skill in the art would have been motivated to use this type of formulation because both Patent '195 and Burrell et al. are directed to utilizing silver containing compositions for the treatment of various anti-microbial diseases. The treatment of skin diseases such as acne would benefit from a topical application such as a hydrogel. Therefore, when utilizing the silver composition of Patent '195 for the treatment of acne one of ordinary skill in the art would have been motivated to formulate the composition into a hydrogel for easier application to the infected area.

**Claims 1-4, 6-10, 18-24 and 35 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of copending Application No. 11813408. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims overlap in scope.**

The instant application claims are set forth above.

Copending '081 claims a composition of silver in water comprising a concentration of silver of between about 5 and 40 parts per million, the silver in the form of colloidal silver particles having an interior of elemental silver and a surface of silver oxide. The silver particles have a diameter greater than 0.005 micrometers and less than 0.015 micrometers. The composition exhibits antimicrobial properties. A further limitation is that the composition comprises hydrogel formed by dissolved a hydrophilic



polymer into the composition of silver in water. Copending '081 claims all the instant limitations in the dependent claims.

Therefore, the scopes of the copending claims overlap and thus they are obvious variants of one another.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

The rejections are maintained since applicant has not made any substantive arguments traversing the rejection.

### ***Conclusion***

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABIGAIL FISHER whose telephone number is (571)270-3502. The examiner can normally be reached on M-Th 9am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Abigail Fisher  
Examiner  
Art Unit 1616

AF

/Mina Haghighatian/  
Primary Examiner, Art Unit 1616